Applicants have amended claims 37, 39, 45, 50 and 58 and added claims 62-72 to more particularly point out and distinctly claim the subject matter Applicants regard as their invention. Support for the amended and added claims may be found throughout the specification, for example at page 2, lines 9-21; page 3, lines 2-13; page 4, lines 6-18, and 24-26; page 5, lines 10-28, and in figure 1.

I. 35 U.S.C. §112, First Paragraph

The Office has rejected claims 19, 21, 54, 41-43, 48, 49, and 55-57 under 35 U.S.C. §112, first paragraph, for allegedly containing subject matter not described in the specification. (Office Action at 2.) The Office acknowledges that the specification describes expression vectors encoding portions of HCMV pp28 strain Ad 169. However, the Office believes that expression vectors that encode "the entire HCMV pp28" do not appear to be described in the specification. (Office Action at 2.) The Office suggests that this matter might be resolved if Applicant pointed to the portions of the specification which describe the expression vectors and transformed cells as now claimed. Applicants respectfully direct the Office's attention to: figure 1; p. 3, lines 14 - 30; and p. 8, claims 4 and 7. These portions of the specification describe expression vectors and transformed cells which encode the entire HCMV pp28 protein. For instance, claims 4 and 7 show the inventors' intent to claim expression vectors that encode the entire HCMV pp28, and page 3 shows the Northern and Southern blotting techniques used for locating the RNA

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encoding the pp28 protein, and finally figure 1 shows a detailed restriction map of the entire HCMV strain Ad 169 genome which localized the pp28 DNA to a 1 kB SmaI/SmaI fragment on the left-hand end of the HindIII R fragment. (Specification at p.3 and figure 1.) One of skill in the art would recognize that the inventors had possession of the claimed invention after reviewing these portions of the specification. Therefore, Applicants respectfully request that this rejection be withdrawn. If it would be helpful, the Applicants plan to discuss this subject matter at the Interview scheduled for March 25, 2003.

The Office has also rejected claims 37, 39, 45, 46, 47, 50-52, and 58-60 under 35 U.S.C. §112, first paragraph, for allegedly not enabling one of skill in the art to make and use isolated DNA fragments encoding antigenic portions of HCMV strains, other than HCMV strain Ad 169, that elicit antibodies that immunologically bind to HCMV. (Office Action at 3.) The Office admits that the specification is enabling for isolated DNA fragments encoding antigenic portions of HCMV strain Ad 169 pp28 but believes that the "specification does not provide guidance for determining the appropriate restriction fragments" or "for locating the corresponding region *in other HCMV strains*." (Office action at 4, emphasis added.) Applicants previously attempted to overcome this rejection by arguing that one of ordinary skill in the art would be able to easily locate HindIII R fragments in other strains of HCMV, and pointed the Office to the *Pande*

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references as evidence that these same methods can and have been used to obtain prokaryotic expression vectors encoding HCMV pp28 in strains other than Ad169 of HCMV. The Office did not find this argument persuasive because in the view of the Office no guidance was given to specifically make the claimed KpnI/SmaI, SmaI/KpnI, or SmaI/SmaI fragments in additional HCMV strains.

Applicants respectfully disagree and point out that while *Pande* indeed did use a different monoclonal antibody, P2G11, to screen different genomic libraries for pp28, *Pande* used the same monoclonal antibody to screen both the Ad 169 and Towne library, and that same antibody immunologically binds to a "single *PstI* fragment having a size of 5.3 kb *in both HCMV Towne and Ad169*." (*Pande* at 307.) This, along with figure 2 of *Pande,* shows that the two HCMV strains have substantial homology. Furthermore, *Pande* used different restriction enzymes than those disclosed in the application, with the exception of XbaI which also shows that the two strains have substantial homology. One of skill in the art would be able to use the technique disclosed in the application and the restriction enzymes, used in creating the restriction map in figure 1 of the specification, SmaI and KpnI, to localize the isolated DNA fragments encoding pp28 in all strains of HCMV. Therefore, Applicants request that this rejection be withdrawn. If it would help to further prosecution, Applicants plan to discuss this subject matter at the Interview scheduled for March 25, 2003.

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The Office has also rejected claims 44, 53, and 61 under 35 U.S.C. §112, first paragraph, for allegedly lacking a written description for claims to "any and all HCMV pp28 segments that are 270 bp in size." (Office Action at 3.) Applicants have cancelled those claims and therefore request that this rejection be withdrawn.

II. 35 U.S.C. §112, Second Paragraph

The Office has rejected claims 37, 39, 45, 50, and 58 under 35 U.S.C. §112, second paragraph, as allegedly being indefinite. (Office Action at page 4-5.) The Office believes that the phrase "pp28" in claim 37 is indefinite because there is no indication of the origin of the protein. Applicants have amended "pp28" to "HCMV pp28." The Office has also rejected claims 39, 45, 50, and 58 as allegedly being indefinite for using inconsistent terminology with the phrase "1.0 kB SmaI fragment" and "1.0 kB SmaI/SmaI fragment." (Office action at 5.) Applicants have amended claims 45, 50, and 58 to read "1.0 kB SmaI/SmaI fragment." Applicants have amended claims 37, 39, 45, 50, and 58 to more particularly point out and distinctly claim the subject matter Applicants regard as their invention. Therefore, Applicants request that this rejection be withdrawn.

The Office has also rejected claims 44, 53, and 61 as allegedly being indefinite for reciting "comprises 270 bp of HCMV pp28." Applicants have cancelled those claims and therefore request that this rejection be withdrawn.

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Applicants respectfully request allowance of the amended and newly proposed claims. Please grant any extensions of time required to enter this response and charge any additional required fees to our deposit account 06-0916.

Respectfully submitted,

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APPENDIX TO AMENDMENT OF MARCH 18, 2003

IN THE CLAIMS:

37. (Three Times Amended) An isolated 0.5 kB KpnI/SmaI fragment encoding an antigenic portion of HCMV pp28 that elicits antibodies that immunologically bind to pp28.

39. (Three Times Amended) An isolated 1.0 kB SmaI/SmaI fragment encoding an antigenic portion of HCMV pp28 that [elicit] elicits antibodies that immunologically bind to pp28.

45. (Amended) The prokaryotic expression vector of claim 19, wherein said prokaryotic expression vector comprises a 1.0 kB SmaI/SmaI fragment of HCMV.

50. (Amended) The prokaryotic cell of claim 21, wherein said DNA molecule comprises a 1.0 kB SmaI/SmaI fragment of HCMV.

58. (Amended) The eukaryotic cell of claim 54, wherein said DNA molecule comprises a 1.0 kB SmaI/SmaI fragment of HCMV.

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